

Docket No. 10004410-1

Amendments to the Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application:

1           1. (previously amended) A method of fabricating an ion optic device comprising:  
2           shaping a ceramic material such that the ceramic material has a cavity, the ceramic  
3           material being at least a portion of the ion optic device;  
4           covering at least a portion of the cavity with at least one material selected from a  
5           group consisting of a conductive material and a resistive material; and  
6           removing a portion of the covering material from said cavity;  
7           wherein shaping the ceramic material comprises providing the cavity being  
8           substantially shaped as a cylindrical bore in the ceramic material; and  
9           wherein removing a portion of the covering material comprises removing at least two  
10          portions of the covering material on opposing surfaces of the interior of the bore to create at  
11          least two separate, opposing areas of covering material..

1           2. (canceled)

1           3. (original) The method of claim 1 wherein the ceramic material is a material  
2           selected from the group consisting of a ceramic, a glass, and a glass-ceramic.

1           4. (original) The method of claim 1 wherein the conductive material is metal.

1           5. (canceled)

Docket No. 10004410-1

1           6. (currently amended) A method of fabricating an ion optic device comprising:  
2           shaping a ceramic material such that the ceramic material has a cavity, the ceramic  
3           material being at least a portion of the ion optic device;  
4           covering at least a portion of the cavity with at least one material selected from a  
5           group consisting of a conductive material and a resistive material; and  
6           removing a portion of the covering material from said cavity;

7           [The method of claim 19] wherein removing a portion of the covering material  
8           comprises removing at least one portion of the covering material circumscribing the interior  
9           perimeter of the cavity to create at least two substantially parallel bands of conductivity on an  
10          inner surface of the cavity.

1           7. (original) The method of claim 6 wherein the cavity extends through the ceramic  
2           material; and  
3                        further comprising the step of attaching a conductive grid over one end of the  
4           cavity.

1           8. (previously amended) The method of claim 6 further comprising separating the  
2           ceramic material into a first portion and a second portion; and  
3                        joining the first portion and the second portion back together with a  
4           conductive grid therebetween.

1           9. (currently amended) The method of claim 1 [19] wherein shaping the ceramic  
2           material comprises providing a blind end in the cavity; and

Docket No. 10004410-1

3            wherein covering at least a portion of the shaped ceramic material with at least  
4   one covering material comprises covering at least a portion of the blind end in the interior of  
5   the cavity with a conductive material.

1            10. (previously amended) An ion optic device for manipulating ions in a vacuum,  
2   comprising:  
3            a ceramic substrate having a cavity therein, said cavity is substantially a first  
4   cylindrical bore; and  
5            a conductive coating on at least two separate areas on opposing surfaces of the  
6   first cylindrical bore, wherein the at least two separate areas of conductive coating are  
7   separated by a secondary bore having an axis parallel to the first cylindrical bore.

1            Claims 11 - 14. (canceled)

1            15. (previously amended) The device of claim 19 wherein the cavity has an open end  
2   and the device further comprises a conductive grid attached to the ceramic substrate over the  
3   open end.

1            16. (previously amended) The device of claim 19 wherein the ceramic substrate is  
2   provided in at least two portions and a conductive grid is provided between the two portions.

1            17. (original) The device of claim 10 wherein the ceramic is a glass-ceramic.

Docket No. 10004410-1

1 18. (previously amended) The device of claim 19 wherein the cavity has an open end  
2 and the device further comprises an electrode member attached to the ceramic substrate over  
3 the open end.

1 19. (previously added) An ion optic device for manipulating ions in a vacuum,  
2 comprising:  
3 a ceramic substrate having a cavity therein, said cavity having a blind end; and  
4 a conductive coating substantially covering the interior surface of the blind end,  
5 said conductive coating further provided in at least two separate bands circumscribing the  
6 cavity.

1 20. (previously added) The device of claim 19 wherein the ceramic substrate is a  
2 glass-ceramic.